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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,072	12/28/2001	Michael Slutsky	1130	2236

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EXAMINER

KIM, AHSHIK

ART UNIT	PAPER NUMBER
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2876

MAIL DATE	DELIVERY MODE
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04/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/034,072	Applicant(s) SLUTSKY ET AL.	
	Examiner Ahshik Kim	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/3/08 (RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 21-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11 and 21-29 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application
5 after a decision by the Board of Patent Appeals and Interferences, but before the filing of a
Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil
action. Since this application is eligible for continued examination under 37 CFR 1.114 and the
fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to
37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114.
10 Applicant's submission filed on January 3, 2008 has been entered.

Amendment

2. Receipt is acknowledged of the amendment filed on January 3, 2008. Currently, claims
1-11 and 21-29 remain in the examination.

15

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly
indicative of the invention to which the claims are directed. Applicant is entitled to a certain
extents to be a lexicographer with respect to the contents of the application. However, the term
20 should be understood by at least one ordinary skill in the art. It is unclear what "Lighthouse" is,
and there is no reference in the specification to infer the meaning of the term pertaining to the
subject matter disclosed in the application.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the
5 basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
10 international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 23-26, 28, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by
15 Bridgelall et al. (US 6,761,316, hereinafter “Bridgelall”).

Re claim 1, 23, 24, 28, and 29, Bridgelall discloses a portable electronic device (see
figures 2-4) comprising an image capture device 32 which reads image data such as photo or
fingerprint (col. 4, lines 1+); a laser scanner assembly 64 (col. 5, lines 11+; col. 1, line 43); an
application specific integrated circuit (ASIC) 22 (col. 3, lines 45+; col. 4, line 57 – col. 5, line 2)
20 communicating with the image capture device and the laser scanner; a common bus that provides
a hardware path from the ASIC to processor (represented as arrows between) the processor 22
and another processor 24). Although Bridgelall does not use the term "bus", the arrows among
the components in figure 1 indicate means for moving data among them. Also see US
2003/0127519 to Ehrhart (figure 2, item 52 and other arrows to 52).

25 Re claims 2 and 25, the processor 22 passes the data to the second processor 24 in
accordance with a stored algorithm (col. 3, lines 52-55).

Re claim 3, the portable terminal is a barcode reader (col. 1, lines 23+).

Re claim 4 and 26, the ASIC processor 22 converts data from analog to digital form (col. 2, lines 55+). The digitization of data can be construed to be decoding.

Re claim 22, the portable device is further comprised of a memory 26 to store collected data (col. 3, lines 55+).

5

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15 7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later
20 invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bridgelall et al. (US 6,761,316) in view of Callaghan (US 6,058,304, previously cited hereinafter “Callaghan”).

25 The teachings of Bridgelall have been discussed above.

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Bridgelall, however, is silent on power source for the device, and ASIC function includes battery monitoring function.

Callaghan discloses a data entry system (see abstract) comprising a scanner head further comprising a laser light source and reflected light receiving means for decoding (col. 9, line 66 –
5 col. 10, line 9); an ASIC circuitry 74, 150 (see figures, 3, 8-10 and 11) communicating with the scanning head 14 (col. 8, lines 36+; col. 14, lines 40+). One of the functionalities of ASIC includes power management (col. 14, line 53).

It is known that ASIC is increasingly customized including various functionalities of the portable device. In doing so, the portable device stays compact, and increases versatility and
10 functionality. It would have been obvious to one ordinary skill in the art to modify ASIC to include power management function of the portable device.

9. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bridgelall et al. (US 6,761,316) in view of Kunert et al. (US 6,109,528, previously cited, hereinafter
15 “Kunert”).

The teachings of Bridgelall have been discussed above.

Bridgelall, however, is silent on power source for the device. Since it is a portable device, one can infer that it may use a battery.

Kunert teaches a portable electronic device 10 (see abstract) comprising an imager device
20 in the form of photo diode, a laser scanner (col. 13, lines 15+) and application specific integrated circuit (ASIC) (col. 12, lines 65+) which controls the majority of functions associated with a laser-based scanner. The micro controller implements a gas gauge function and recharging

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function (col. 18, lines 1+). Kunert further discloses that the device is further comprised of a Nickel-metal hydride type (col. 17, lines 17+) or lithium-ion type (col. 19, lines 15+).

In view of Kunert's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to use well known Ni-MH battery to the teachings of Bridgelall in order to conserve power and reduce the frequency of charging. Ni-MH is a well-known battery type and used in wide variety of portable devices.

10. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bridgelall et al. (US 6,761,316) in view of Meier et al. (US 6,561,428, previously cited, hereinafter "Meier").

The teachings of Bridgelall have been discussed above.

Bridgelall fails to specifically teach or fairly suggest that the ASIC in the barcode reader further comprises IDE interface function.

Meier teaches an optical reader 10 reading image data (see abstract) comprising an ASIC circuitry (col. 5, lines 5, lines 46-52). The circuitry further includes memory devices including "Compact Flash" or MMC card (col. 5, line 53- col. 6, line 15), which means that the interfaces for the card would also be included. The micro controller implements a gas gauge function and recharging function (col. 18, lines 1+).

In view of Meier's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate well-known data storage mediums such as "CF" card or hard-disks to the teachings of Bridgelall in order to increase storage capacity of the data terminal. As known, the barcode and other image data are becoming increasingly denser, carrying large amount of information. Accordingly, the reader apparatus have to have large

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memory area to capture and manipulate complex image data. Moreover, by providing permanent storage area, the image can be stored and transmitted to other device, and therefore an obvious expedient.

11. Claims 21 and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Bridgelall
5 et al. (US 6,761,316).

The teachings of Bridgelall have been discussed above. Bridgelall further discloses that the data can be transmitted to external device or CPU 24 (col. 4, lines 21+). It is the Examiner's position that data transmitted to the CPU or external device can be processed independently of activities of the data capturing devices – laser scanner or image capturing device.

10

Allowable Subject Matter

12. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

The claims are directed at a portable electronic device comprising an image capturing device, a laser scanner, an ASIC circuitry for communicating with the image capturing device and the laser scanner; and a common bus. The ASIC function includes smart and dumb battery function which further includes a gas gauging function. Such portable device is neither disclosed nor
20 suggested by the cited references.

Conclusion

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I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Ehrhart et al. (US 2003/0127519) disclose a portable terminal comprising ASIC circuitry. Applicant is respectfully suggested to carefully review these references.

II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Ahshik Kim* whose telephone number is (571)272-2393. The examiner can normally be reached between the hours of 8:00 AM to 5:00 PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571)272-2398. The fax phone number for this Group is (571)273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available for Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions or access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ahshik Kim/

Primary Examiner
Art Unit 2876
April 11, 2008